

ID 88049221



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WHITE RIVER RESOURCE AREA

P.O. Box 928
Meeker, Colorado 81641

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DECISION NOTICE AND FINDING OF NO SIGNIFICANT IMPACT OF THE LOWER WOLF CREEK WATERSHED MANAGEMENT PLAN RIO BLANCO AND MOFFAT COUNTIES, COLORADO

White River Resource Area
Craig District, BLM

Based on the analysis and evaluation described in the attached environmental assessment, it is our decision to adopt the Moderate Action Alternative. This alternative and expenditure of funds will result in cost-effective treatments which are designed to reduce soil erosion, salinity transport, enhance the native perennial vegetation, increase moisture infiltration, and provide social and economic benefits, thru the use of engineered structures and vegetation manipulations. This alternative is preferred over the Crisis Erosion, Vegetation, Engineering, and No Action alternatives because it provides the best compromise of effects on the various resources of the area.

Unavoidable short-term adverse effects will be caused by increases in erosion due to disturbance of soils and vegetation by construction. In addition, some alteration of the visual environment is unavoidable although the small size of the projects will keep this to a minimum.

A portion of the land area described in this environmental assessment has been previously analyzed in the Wolf Creek Allotment Management Plan. Both of these plans discuss the impacts and effects of erosion and livestock use. Our decision is consistent with these plans, and no new or amended environmental impact statement will be prepared.

This proposal does not involve any unprecedented actions. Therefore, implementation of this proposal will begin immediately. The environmental assessment is available for review at the office of the responsible officials listed below.

Recommended by:

Curt W. Leet
Curt Leet, Soil Scientist

9/21/84
Date

Jack Wenderoth
Jack Wenderoth, Hydrologist

9/21/84
Date

Approved by:

B. Curtis Smith
B. Curtis Smith, Area Manager
Meeker, CO 81641

9/24/84
Date

Lee Carie
Lee Carie, District Manager
Craig, CO 81626

9/25/84
Date

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Activity 43405329

BUREAU OF LAND MANAGEMENT

EA FACE SHEET

OFFICE: WHITE RIVER RESOURCE AREA FY & REPORT # _____
ACTION: Lower Wolf Creek Watershed Mngmt. NO. OF PAGES CO-017-84-59
(Project Name, Case Type, etc.) Plan
LOCATION: Lower Wolf Creek Drainage SERIAL NO. C- _____

TEAM SIGNATURES:	TITLE	RESOURCE VALUES ASSIGNED	HOURS
<u>Curtis Leet</u>	Soil Scientist	Climate Soils Vegetation	250
<u>John Wadsworth</u>	Area Hydrologist	Geology Water Resources	200h
<u>Richard R. Jones</u>	District Hydrologist	Water Resources	346 hr 5 min 2 W.M.
<u>Russell W. Kipp</u>	District Soil Scientist	Monitoring	
<u>Alan McIsaac</u>	Surface Reclamation	Oil & Gas	4
<u>Jack Sheffey</u>	Forester	Forestry	1
<u>John E. Smith</u>	Wildlife Biologist	Wildlife	12
<u>John E. Smith</u>	Range Conservationist	Range Management	40
<u>B. F. Beckwith</u>	Geologist	Minerals	6
<u>Benny J. F. Johnson</u>	Archeologist	Archeology	4

ENVIRONMENTAL
COORDINATOR: Suzanne C. Taylor 9/24/84
(Signature) (Date)

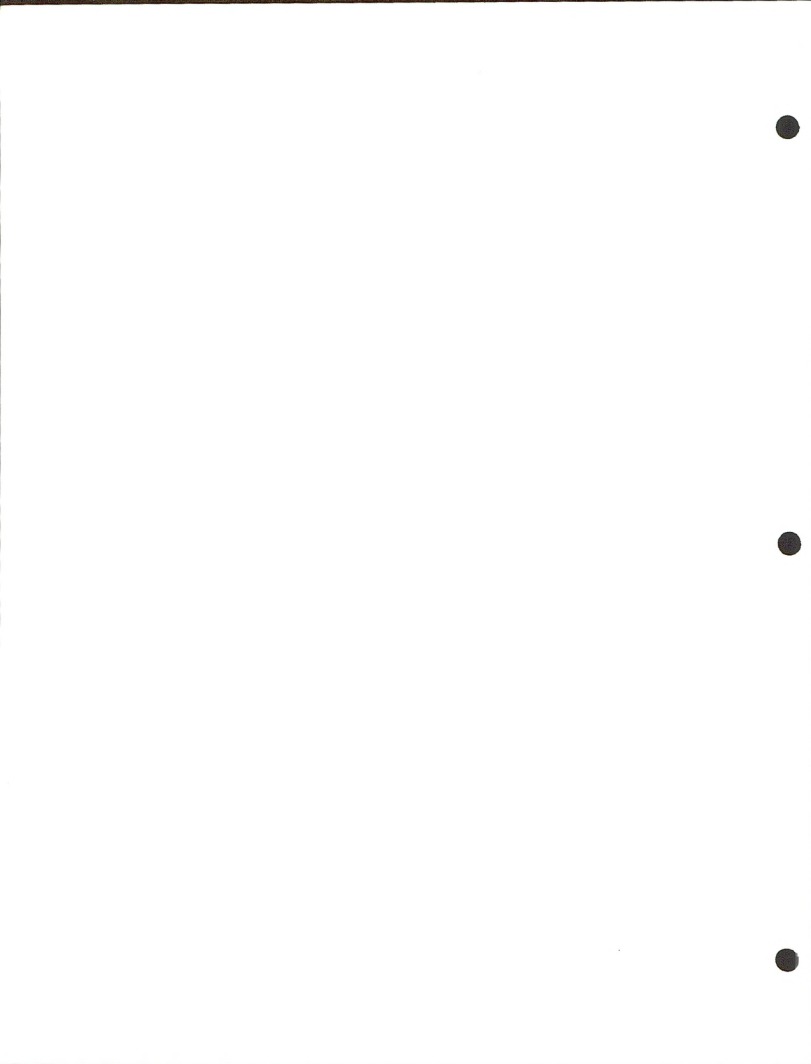
COMPLIANCE
OFFICER: _____

Area
~~DISTRICT~~ MANAGER: B. F. Beckwith
(Signature)
9/24/84
(Date)

380 on 12/24/84
just Ext.

EA OUTLINE

	Page
I. Purpose and Need for Action.....	1
II. Description of Alternatives Including the Proposed Action.....	1
III. Affected Environment.....	1
IV. Environmental Consequences.....	1
Alternative A - No Action.....	1
Impacts.....	1
Adverse Effect Which Cannot Be Avoided.....	2
Short-Term vs Long-Term.....	2
Irreversible/Irretrievable.....	2
Possible Conflicts.....	2
Alternative B, C, and D - Minimal, Low, and Moderate.....	2
Alternative E - High Action Alternative.....	2
Impacts.....	2
Adverse Effect Which Cannot Be Avoided.....	7
Short-Term vs. Long-Term.....	8
Irreversible/Irretrievable.....	8
Possible Conflicts.....	8
V. Mitigation.....	8
A. Mitigation for Alternative A.....	8
B. Committed Mitigation.....	8
C. Additional Mitigation Measures.....	9
VI. Public Interest.....	11
VII. Recommendations.....	11



ENVIRONMENTAL ASSESSMENT
FOR IMPLEMENTING THE
LOWER WOLF CREEK WATERSHED MANAGEMENT PLAN

I. Purpose and Need for Action

See Section I.B. Introduction to the Lower Wolf Creek Watershed Management Plan (LWC WMP), pages 1 and 2.

II. Description of Alternatives Including the Proposed Action

The five alternatives addressed for the Lower Wolf Creek Watershed Management Plan include:

- Alternative A: No Action
- Alternative B: Minimal Action
- Alternative C: Low Action
- Alternative D: Moderate Action
- Alternative E: High Action

The BLM's proposed action alternative is Alternative D: Moderate Action. A detailed description of each alternative can be found in Section IV the Project Implementation of the LWC WMP, pages 30-37.

III. Affected Environment

A description of the existing environment for the area is in Section II, Description of Watershed Components, pages 8-30.

IV. Environmental Consequences

Site specific analysis of environmental consequences will be conducted for each project when they are located in the field and prior to implementation.

Alternative A - No Action

Under this alternative the proposed water developments would not be built.

Impacts

Current problems would continue in the existing environment including impacts to the geology, alluvial valleys, soils, vegetation, and hydrology. There would be no change in the existing environment for climate, air quality, topography, minerals, cultural resources, recreation resources, aesthetics/visual resources, social aspects, economics, land uses, and wildlife.

There would be continued accelerated erosion of the area through upstream migration of actively cutting gullies. Current problems of channelization, loss of soil, salinity, and sediment transport to the White River would continue. Livestock would con-

continue to concentrate around existing water sources during the spring and feeding areas in the winter, therefore, uneven distribution and forage utilization would continue. No mitigation measures would be required for the No Action Alternative.

The No Action Alternative would likely, over the long-term, result in decreased forage production as gully erosion and upstream nickpoint migration continues. These anticipated losses in forage production would somewhat be offset as the impacted allotments listed in Table 2 came under intensive livestock management. Intensive livestock management alone cannot halt the headcut migrations presently occurring on many gully systems.

Adverse Environmental Effects Which Cannot Be Avoided

Erosion and channelization would continue at the present level. Livestock concentration at existing waters would continue to cause uneven patterns of forage utilization. Soil disturbance and erosion around water sources and bedding grounds would continue.

The Relationship Between Short-Term Uses of Man's Environment And The Maintenance And Enhancement of Long-Term Productivity

Channelization and erosion of the gullies would continue at the present level. This would result in a continued decline in the long-term productivity.

Irreversible And Irretrievable Commitment Of Resources

Under this alternative there would be no irretrievable commitment of resources, except for the continued erosion and soil loss on-site.

Possible Conflicts

Poor water quality would continue to affect downstream users off-site.

Alternatives B, C, and D

The environmental consequences from implementation of Alternative B, C, or D would be similar to those described for Alternative E. The alternatives are described in Section IV.B. of the Lower Wolf Creek WMP. The only difference is that the degree of impact for Alternatives B, C, or D would be less than for Alternative E. For a description of these impacts, see Alternative E.

Alternative E - High Action Alternative

Impacts

A. Climate

No impacts would be expected.

B. Topography

Small localized modifications will occur from the construction of pits, reservoirs and contour spreader dikes. The dams will appear man-made over the long-term regardless of rounding. Some gullies will hopefully be filled with sediment creating a more stable landscape. These effects are considered long-term and beneficial.

C. Geology

No impacts would be expected.

D. Minerals

1. Coal

If coal was developed by surface mining methods, projects done for the watershed plan might be destroyed or rendered useless if not mitigated. If the coal development was done by underground mining methods, projects would not be affected.

2. Locatable

If any mining claims became patented, any project on that claim would become property of the claimant. Therefore these projects should not be placed on a mining claim.

E. Oil and Gas

No impacts would be expected.

F. Soils

Impacts to the soil resource caused by construction could increase the potential for erosion until surface disturbances are successfully revegetated. The impacts to the soils through implementation of the WMP should be beneficial over the long-term resulting from increased stability, water infiltration, and reduced sediment loss. The sedimentation in reservoirs and vegetation manipulation areas is considered beneficial by potentially increasing the site production capabilities.

The greatest beneficial impacts are expected in Treatment Units 1 and 2 through a concentration of salinity control projects on the Mancos Shale uplands and alluvium. The effects in Treatment Unit 3 should be realized through gully stabilization and healing of headcuts and gully banks. No major effects are expected in Treatment Unit 4 and 5.

G. Hydrology

The proposed salinity control structures would have a beneficial impact by reducing the salt load and sediment transport in the White River and subsequently in the Taylor Draw Reservoir. The structures would also aid in decreasing the salinity of the Colorado River. Estimates (by the Soil Conservation Service) and upland erosion from the Mancos Shale are approximately 5 to 12 tons/acre/year while erosion rates are much higher from gullied land, but no data exists. Estimated salt yield production ranges from .17 to .40 tons/acre/year from this soil loss.

H. Vegetation

Small localized areas disturbed by construction will be devoid of vegetation until successfully reclaimed.

Areas presently in poor or fair range condition should become more stable by achieving an increase in productivity of native perennials and corresponding increase in density and cover, decreasing the erosion potential following vegetation manipulation projects. In the water storage areas of new projects riparian vegetation is expected to invade. This invasion of riparian vegetation will increase the vegetation community diversity in the WMP area. Maintenance of existing projects will generally avoid areas having established riparian vegetation, that is presently wildlife habitat.

The long-term impacts from implementation of the LWC WMP are expected to be very beneficial primarily in Treatment Units 1 and 2. Only if very large structures are placed in Treatment Unit 3 will any changes in potential site productivity and species composition occur. Treatment Unit 4 should improve slightly and Treatment Unit 5 which is not scheduled to receive any improvement should not be impacted.

I. Wildlife

Big Game

All WMP project work would involve minor short-term displacement of big game. Mitigation would relegate big game disturbance to those periods and seasonal ranges least sensitive to the consequences of harassment and/or indirect habitat loss.

Vegetation manipulations inevitably reduce or improve habitat utility depending on seasonal use and affected species. For example, brush control which promotes herbaceous (particularly forb) production can be expected to benefit summer and fall antelope ranges; similarly, water developments could help improve animal distribution on available ranges previously lacking free

water sources. In the case of deer and elk, pinyon-juniper conversions may increase the quantity and quality of winter forage, but at the same time, limit total available hiding and thermal cover. WMP projects will be reviewed on a case-by-case basis and impact assessments made in consideration of such factors as size and configuration of manipulations and the extent and relative distribution of affected habitats.

Overall, big game, especially pronghorn antelope, would expectedly benefit from WMP accomplishments.

Sage Grouse

Sage grouse are closely associated with the sagebrush type throughout the year, and as such, any sage manipulation can be detrimental to sage grouse populations depending on seasonal range use and stand characteristics (e.g., canopy density, height). For example, sage grouse are entirely dependent on sagebrush during the winter period, October through April. As snow depth increases, birds move to lower elevations and select windblown prominences or dense sage stands (20 to 40 percent) on broad flats. As such, any loss or long-term alteration of limited winter habitats can seriously affect sage grouse populations. On the other hand, small sagebrush manipulations in areas with good potential for enhancing forb production and composition can be expected to benefit brood-rearing habitat by providing an important dietary requirement of young sage grouse.

On-site examination of all manipulations proposed on sage grouse ranges will be conducted by CDO and BLM personnel prior to project implementation. Through measures such as design recommendations, it is anticipated that long-term impacts to sage grouse habitats can be minimized, or seasonal habitats selectively enhanced to the benefit of resident sage grouse populations.

Raptors

Construction activities in close proximity to occupied raptor nests can result in nest site abandonment or the loss of current reproductive efforts, thus undermining area raptor productivity. Applied mitigation will adequately safeguard such nests and annual nesting efforts.

Non-nesting or wintering raptors would not be affected to any measurable degree by WMP projects.

Threatened and Endangered Species

Project work associated with the Watershed Management Plan would pose no conceivable threat to bald eagle, Colorado squawfish, greater sandhill crane or whooping crane populations or any associated habitats. There is slight probability that direct mortality of black-footed ferret could occur during earth moving operations, but mitigation involving prairie dog town surveys should minimize this concern.

J. Livestock

The intensive watershed stabilization and salinity controls proposed, including vegetation manipulations and water control structures, may be both beneficial and adverse.

Vegetation manipulations that remove or convert saltbush to perennial grasses on winter sheep range would result in a loss of winter feed to some livestock permittees. However, these same manipulations on spring or summer range could benefit livestock due to increased forage production potentials of the native perennial grasses.

Vegetation manipulations in the pinyon-juniper woodland community could also benefit livestock by converting a low forage producing community to a high forage production community with the successful establishment of the native grasses. Depending on location, those treatments may or may not be utilized by the livestock. The loss of five square miles of pinyon-juniper and/or sagebrush communities in a winter use area could be critical to the permittee, yet if this treatment occurs in a spring or summer use area, the benefits could be great.

Similar results could occur from the construction of watershed control structures. As the first two treatment units occur entirely within the winter range sheep allotments, reservoir construction would not benefit livestock. Negative impacts could result from the larger detention-retention structures, because sheep or cattle could become bogged in the mud while trying to get to water unless they are fenced. The spreader dikes could have a similar effect in bogging sheep, depending on how large a system was constructed. The smaller control structures, such as gully plugs, pit reservoirs, and rock check dams should not pose a potential hazard to the livestock. Beneficial results could be realized from these smaller types of structures during the spring and summer seasons of use. The additional water availability would better distribute the livestock over allotments and could result in more uniform utilization of the available forage by the stock. As the watershed stabilizes overtime (severely eroding gullies would heal and vegetation would become established), increased livestock forage would result.

These consequences would develop as the stabilization program developed. The quickness with which they appear would depend on which control alternative was chosen.

K. Cultural Resources

Previously undetected subsurface cultural resources could be adversely impacted by earth disturbing activities.

L. Visual Resources

Visual impacts created by the proposed action are determined to be within the limits of acceptable change for the respective management classes.

M. Recreation Resources

A small amount of additional recreational use would be expected in the area due to improved access.

N. Wilderness Resources

No impacts would be expected.

O. Land Uses

No impacts would be expected.

P. Social and Economic

No impacts would be expected.

Alternatives B, C, D, and E

The following situations would occur if one of these alternatives was implemented.

Adverse Environmental Impacts Which Cannot Be Avoided

Increases in erosion due to disturbance of soils and vegetation by construction could not be avoided. Concentration of livestock and wildlife around water facilities, which disturbs soils and vegetation, could not be avoided.

It is standard BLM policy to conduct Class III cultural resource inventories. However, it is possible that previously undetected subsurface cultural resources would be adversely impacted by earth disturbing activities.

Some alteration of the visual environment is unavoidable, but the small size of the projects will keep this to a minimum.

The Relationship Between Short-Term Uses Of Man's Environment And
The Maintenance And Enhancement Of Long-Term Productivity

There would be a localized loss of soil and vegetation due to animal concentration around the water developments. Throughout the WMP area improvement in animal distribution would result in an increase in native perennial species and a reduction in soil loss through erosion on a site specific basis. Capture of water and sediment by the reservoirs would decrease the rate of gully development.

Irreversible And Irretrievable Commitment Of Resources

The initial soil loss as a result of construction would be an irretrievable commitment of the soil resource.

Should archaeological site damage occur, it would represent an irretrievable loss of archaeological information.

Storage of water on-site during spring runoff may result in a loss of water downstream, however the potential for alluvial aquifer recharge from this storage may extend base flows in these channels longer into the summer.

Possible Conflicts

There are no known conflicts between these alternatives and the objectives of federal, regional, state, and local land use plans, policies, and controls for the area.

V. Mitigation

A. No mitigation measures are required for Alternative A: No Action.

B. Committed Mitigation - Alternative B, C, D and E

- 1) Small disturbances such as water storage projects and large vegetation manipulations will be revegetated with adapted species. Seed mixtures will be developed at the time site specific EAs are written.

Recommended seedbed preparation would include disking to breakup the surface crust and straw mulch applied at a rate of 1.5 tons/ac to decrease runoff, evaporation and soil crusting.

- 2) Project work will not be permitted during spring runoff (2/1 to 4/1).
- 3) A Class III (100% pedestrian) cultural resource inventory will be completed prior to construction and in accordance with accepted BLM procedures in all areas to be impacted by the proposed actions. A report of the inventory will be submitted and approved by the BLM Area Archaeologist, with stipulations as appropriate in order to comply with the Archaeological

Resources Protection Act of 1978 (as amended) and Section 106 of the National Historic Preservation Act of 1966.

- 4) If, in its operation, the holder discovers any cultural remains, monuments, or sites, or any object of antiquity subject to the Antiquities Act of June 8, 1906 (34 Stat. 225; 16 U.S.C. secs. 431-433), the Archaeological Resources Protection Act of 1979 (Public Law 96-95), and 43 CFR, Part 3, the holder shall immediately cease activity and report directly to the Area Manager. The Bureau shall then take such action as required under the acts and regulations thereunder. The holder shall follow the mitigation requirements set forth by BLM concerning protection, preservation, or disposition of any sites or material discovered. In cases where salvage excavation is necessary, the cost of such excavations shall be borne by the holder unless otherwise stated.
- 5) Permittee consultations should be initiated on all vegetation manipulations at least one year prior to construction to develop deferment plans for grazing use. Livestock grazing should be prohibited for at least two growing seasons until regeneration is established on vegetation manipulations sites.
- 6) All proposed project work within white-tailed prairie dog habitat will be reviewed and, if considered necessary, surveyed by the WRRRA wildlife biologist for evidence of black-footed ferret. If ferret occupation is suspected, the U.S. Fish and Wildlife Service will be contacted and Section 7 consultation procedures initiated.

C. Additional Mitigating Measures

The following possible mitigating measures should be applied where possible:

- 1) Surface disturbance and soil erosion can be lessened by selecting manipulation methods that minimize disturbance (e.g., hand thinning instead of chaining, etc.), constructing waterbars on access roads into project areas, providing gully plugs in project areas, proper timing of projects, implementing projects only on slopes and soil types suitable for the project, and fertilizing and revegetating areas as soon as possible.
- 2) All seed mixtures should be designed to meet the needs of known wildlife species in the area (i.e., favorable species of brush, trees, grass, or forbs). Vegetation removed for reservoir construction should be compensated for by a proper seed mixture, including emergent and submergent species. Fertilize as necessary.
- 3) Sagebrush treatments should generally be designed for a partial or mosaic kill in an effort to create a structurally diverse plant community. Contiguous stands of mature sage-

brush should remain to provide adequate forage and cover to resident wildlife.

- 4) To avoid adverse wildlife-human interactions resulting from new roads into project areas, all new roads should be physically closed after the project is completed, unless they are needed to maintain the project. If maintenance roads are needed, seasonal closures should be considered to prevent disturbance to wildlife during critical periods.
- 5) Detention and retention control structures should be fenced to exclude livestock, in cooperation with range management. As required, water would be piped to stock tanks away from these structures for livestock use.
- 6) Sagebrush manipulations proposed on sage grouse ranges will be evaluated jointly by the WRRRA wildlife biologist and Colorado Division of Wildlife in an effort to determine potential impacts to sage grouse and such mitigation required to protect important sage grouse habitats. Emphasis will be given those ranges within two miles of known strutting grounds, areas with perennial water sources and winter use areas.
- 7) Project work within identified crucial use areas for wildlife will generally be governed by seasonal activity restrictions as indicated below:

<u>Habitat Description</u>	<u>Activity Restriction Dates</u>
Mule deer severe winter range	1 December to 31 March
Elk calving area	1 May to 30 June
Pronghorn fawning concentration area	15 May to 30 June
Sage grouse strutting ground buffer zone	1 March to 15 May
Raptor nest buffer zone (occupied nests)	1 March to 31 July

- 8) Where applicable, fencing will be designed to minimize problems associated with big game fence negotiation and/or hindrance to free movement. In general, fences on deer and elk ranges will conform to BLM "Type D" fence specifications. On dual use sheep/pronghorn ranges, fence design will generally conform to specifications allowing unhindered pronghorn movement, but may vary according to project intent or the intensity of rehabilitation efforts. Fence design features will be developed on a project specific basis at the environmental assessment stage.
- 9) All project work will be examined for compatibility with wildlife resources. Individual projects will be subject to design modification suggestions deemed necessary by the WRRRA wildlife biologist to: 1) minimize or avoid adverse long-term impacts to wildlife habitat utility or function and 2) deter-

mine if integral habitat enhancement can be achieved without compromising project intent or funding.

VI. Public Interest

The public is interested in actions that affect the Federal lands. However, this action is not expected to be controversial.

VII. Recommendations

A supplemental environmental assessment will be completed for each project implemented as part of this Watershed Management Plan. Further stipulations or recommendations on project construction will be made at that time.

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